Assessment Mission Cambodia

User Fee System and Health Equity Fund in Krong Kep

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Abbreviations

AFH	Action for Health
ADB	Asian Development Bank
CAAFW	Cambodian Association for Assistance to Families & Widows
CDC	Chronic Disease Clinic
CFDS	Cambodian Family Development Services
CPA	Complementary Package of Activities
EED	Enfant et Développement
EFSG	Equity Fund Support Group
GTZ	German Technical Cooperation
HC	Health Centre
HCCMC	Health Centre Co-Management Committees
HEF	Health Equity Fund
HFS	Health Financing Scheme
HIS	Health Information System
HNI	HealthNet International
IEC	Information Education Communication
IPD	In-Patient Department
MDM	Médicins du Monde
MPA	Minimum Package of Activities
MOH	Ministry of Health
MSF	Médicins Sans Frontières
NGO	Non-Governmental Organization
OD(O)	Operational District (Office)
ODD	Operational District Director
ODO	Operational District Office (Health)
OPD	Out-Patient Department
PEF	Pagoda Equity Fund
PH	Provincial Hospital
PEFSC	Provincial Equity Fund Support Committe
SRC	Swiss Red Cross
RCG	Royal Cambodian Government
RH	Referral Hospital
UFS	User Fees Scheme
UNICEF	United Nations' Children Fund
VHSG	Village Health Support Group (formerly the Feed-Back Committee)
WB	World Bank
WHO	World Health Organization

1 Introduction

The objective of the mission was to assess the applicability of user fee systems and health equity funds in Krong Kep and subsequently develop a plan of action for possible CIH intervention. Detailed terms of reference are presented in Chapter Annex 11.

Krong Kep is a municipality bordering the Gulf of Thailand. It has been upgraded from District to City level in 1995 (See chapter Annex 1 for details). It comprises of two administrative districts, five communes and 16 villages.

The Ministry of Health defines Krong Kep as an Operational (Health) District. The Operational District Office (ODO) in charge of the health district has the same position and responsibilities as a Provincial Health Department in the provinces.

The public health service structure in Krong Kep comprises one Operational District Office, one Referral Hospital (RH) and three health centres. The district hospital is located in Kep community. The health centres are located in Angkaol, Ou Krasar and Pong Tuek.

The Operational District Director (ODD) works on the basis of four communes.[1]

The ODD has requested funds to construct a fourth health centre but so far these have been denied. Currently, medical staff from the Ou Krasar health centre do outreach activities in the Kaeb and Prey Thum communes. During these outreach activities they carry a medical kit and address health problems as they are presented. In the Health Information System (HIS) data Prey Thum is taken as a separate health facility.

Table 1: Administrative organisation Kong Kep

District	Commune	Village	Health centre	Population[2]
Damnak Chang'aeur	1. Angkaol	1. Ampeaeng, 2. Tuol Srangam, 3. Kaoh Saom 4. Angloul	Angkaol	6,972
	2. Ou Krasar	5. Ou Krasar 6. Damnak Chambak	Ou Krasar	5,901
	3. Pong Tuek	7. Ou Doung 8. Prey Ta Koy 9. Phnum Leav 10. Rones 11. Chamka Bei	Pong Tuek	7,886
Kaeb	4. Kaeb	12. Kaeb 13. Kaev Krasang	Prey Thum (yet to be constructed)	10,794
	5. Prey Thum	14. Dmanak 15. Chang'aeur 16. Kampong Tralach 17. Thmei		

Source: www.moh.gov.kh

[1] For their purposes, the commune of Kaeb is part of the Prey Thum commune.
[2] Source: ODD/Governor 2003

The population estimates differ according to source. For this report the ODD/Governor estimates will be used.

Table 2: Population

	Source	Year	Population	# of families	Surface in km^2
1	Cambodian National & Provincial Resources Data Bank: www.moc.gov.kh	n.a.	28,660	5,369	336
2	MoH: Department of Planning	2004	36,592		
3	ODD/Governor	2003	31,533		142
4	Cambodian Red Cross	n.a.	32,525	6,385	

Source: 1 www.moc.gov.kh, 2 ODO internal document, 3 ODO office, 4 Map produced by Cambodian Red Cross, Kep office

Most information about the health facilities was obtained from the ODO. All facilities fill in the regular, monthly, Health Information System (HIS) forms and submit these to the ODO. The information is aggregated on district level and send onwards to the central Ministry of Health in Phnom Penh.

Table 3: Selected health facility characteristics 2003

Name	# of personnel	New Cases	IPD	Population	Utilization rate (HC only)	Overall cash expenditure 2003
Operational District Office	10					72,438,500
District Hospital	22	8,734 (OPD)	715			40,356,400
Angkaol	8	2,263		6,972	0.32	9,132,500
Ou Krasar	6	2,918		5,901	0.49	11,093,300
Pong Tuek	9	2,205		7,886	0.28	11,268,500
Prey Thom	2	1,914		10,794	0.18	966,000
Operational District	57	18,034	715	31,553	0.29	406,398,157

Source: various ODO documents

With the exception of the Cambodian Red Cross no national or international organisations support the regular health structures. The Red Cross operates an office in Kep commune and are organising outreach activities using village based health workers. Their program is partly supported by the UK Red Cross.

The Kep RH is a hospital of the first category with 25 beds (of which 5 are for TB). As a hospital of the first category they do not have surgical capacities. If surgery is necessary the patients are to be referred to Kampot PH, a hospital of the third category. In practice few referrals do take place. Kampot PH's surgical unit does not seem to be fully operational. An alternative could be the hospital (second category) in Kampong Trai (RH in Kampot Trai OD, Kampot province) which also has a surgical unit. However, this unit does not seem to be operational at all.

The MoH guideline states that there should be one hospital bed per 1000 population. This would come to 36 beds for the Kep RH (apart from the TB beds). The ODD has indicated that this year a request for an increase in the number of hospital beds will be made. However,

the occupancy rate is around 54% with an average stay of 5.5 days. There is therefore still room for growth.[3]

The total number of positions in Kong Kep Operational District is 72. Of these 34 are medical positions and 37 are non-medical positions. The director and the two vice-directors of the ODO are medical doctors. The number of medically trained persons employed in the ODO is therefore 36. The non-medical staff in the health facilities are all employed in menial positions: driver, cleaner, guard.

The Kep RH does not maintain its own financial accounts, nor does it employ any accountancy or administrative staff. The accounts are done by the ODO accountant. The budgets for all health facilities are made with the full engagement and support of the ODO.

Table 4 : Human resources in Kong Kep Operational Health District

	ODO	RH	Okrasa	Pong Tak	Ang Koul	Total
Medical staff	0	16	5	8	6	35
Non-medical staff	26	5	2	2	2	37
Total	26	21	7	10	8	72

Guidelines for the Development of Operational Districts page 36 (MOH, 1997) for the composition of the HMC and TT

The Kep RH quality standards are monitored by the Hospital Management Committee (HMC).[4]

No detailed information on economics indicators could be obtained for Krong Kep but the next table does give some general information on average monthly incomes and average annual health expenditure for Cambodia. Although the overall expenditure is low compared to a country as Canada it does look promising in as so far as there is potential to transfer funds from the private sector to the public sector. This can only be done if and when patients decide to spend more in the public sector.

Table 5: Per capita income and health expenditure

Average monthly incomes/person[5] in US$:	Cambodia 20.80	Phnom Penh 57.61	Urban 25.82	Rural 16.42
	Total	**Government**	**Donors**	**Private**
Average annual expenditure on health per capita in US$	32.9	2.9 (9%)	6.25 (19%)	24 (72%)

Source: Lankers 2003

Some selected health indicators with data for Kep and national level and are presented in Table 6. Overall the situation in Kep does not differ significantly from the national average

[3] In Kirivong OD for example there are 85 beds for more than 200,000 people, in Maung Russay 85 for 134,000 people.
[4] Above 120 beds, the Technical Team is responsible to uphold quality standards
[5] Cambodia socio-economic survey 1999

with the exception of hospital deliveries for which the Kep data are higher than the national average.

Table 6: Selected health indicators

	National[6]	Kep[7]
# of contact/inhabitant/year	0.37	0.49
Bed occupancy rate	54%	53.87%[8]
Average length of stay (days)	6	5.5
Hospitalisation rate	2.3	
Home deliveries	91.36%	84.71%
Health centre deliveries	3.31%	0.001%
Hospital deliveries	5.33%	15.16%

2 User fee systems

2.1 Introduction

Cambodia's Constitution has always allowed for user fees as long as access to health care is guaranteed for all through an exemption scheme for the poor. But only in 1996 the Cambodian parliament adopted the National Charter on Health Financing in the Kingdom of Cambodia. The Charter provides the legal and organisational framework for the introduction of user fees at public health facilities.[9]

The overall aim of the introduction of health financing schemes is to increase access to health facilities by improving the quality of service provision. The underlying assumption is that the present government salaries are so low that they do not offer any incentive to the health staff to deliver good quality care, nor do the facilities have a sufficient budget to cover running costs and incidental expenditures.

By increasing the income for the facilities the government expects that they will deliver good quality care for the patient. This would include a continuous presence of health care personnel in the health facility, no informal user fees, well maintained premises, availability of drugs, medical supplies and medical material etc..

The formal distribution of the user fees income is as follows:

- 50% as a contribution to the running costs
- 49% as a contribution to bonus payments to staff
- 1% to be transferred to the Treasury

Any health financing scheme has to include the following:

- Ensure a transparent management system with regular monitoring and accountability, involving community representation;
- Development and implementation of the scheme only after consultation with community representatives;
- A methodology to identify those members to be exempted from payment.

[6] National health statistics 2001
[7] 2003 HIS data from the ODO
[8] Consultant's calculations
[9] An unofficial translation of the Charter can be found in: SCF Australia 2002 Appendix A

Although the charter indicates that the Ministry of Health determines the limits within which the fees are to be maintained (Chapter 3, article 15), there does not seem to be a published list presenting these limits.

If and when a facility plans to introduce a user fee system, its introduction is subject to approval of the Ministry of Health.

The evaluation and monitoring of the health financing schemes are the responsibility of the provincial and national health authorities

Many health facilities have introduced user fees since the adoption of the National Charter. As of September 2000, 128 health centres, 14 referral hospitals and 1 laboratory had obtained formal MoH approval to introduce user fees. In addition there is an undetermined number of facilities with formal user fee schemes who have not yet obtained approval of the MoH. Finally, there are a large number of facilities where informal user fee schemes exist which are not approved by the MoH nor are they necessarily fulfilling the MoH guidelines.[10]

In practice the 49% of the user fee income used for bonus payments to staff is often much higher and can reach 80%. It seems that user fee systems are seen more and more as solely as means to increase the staff's income.

With the introduction of a user fee system, an additional relationship with the personnel is often defined. The increased income for the personnel (salary plus bonus) can be an opportunity for the managers in the ODO to redefine the relationship with the personnel. In effect, this relationship will forcefully have to change as the responsibilities of the personnel and the demands on them will change.[11]

2.2 User fees in Krong Kep

In Krong Kep, the ODO, with the permission of the Governor, has introduced a user fee system for the hospital as of 27/01/2004.

The ODO has also send a request to the Governor to implement a user fee system for the health centres. In the ODO's annual plan for 2004, the introduction is foreseen for the second trimester.

The hospital's user fee system has been developed and implemented by staff of the RH and ODO. There has not been formal community consultation or participation in the process.

No effects had been measured or noticed yet as the system had only be introduced the week of the consultant's visit. However, from discussions with RH personnel it was clear that the level of the fees had not been determined taking local purchasing power into account. The level of the fees had been calculated using examples from other, successful, user fee systems

[10] Wilkinson 2001

[11] This is the case for the New Deal where even new job descriptions were made to reflect the new relationship which for example took into account the 24/7 nature of the facility. The internal regulations were updated, an incentive system was designed and accepted by the staff and an individual evaluation system was introduced to establish the level of the individual bonus.

(e.g. Siem Reap which had been visited by Kep ODO representatives) and the desire to be able to pay out a certain minimum salary. Overall though an effort had been made to assure that the levels were amongst the lowest.

The fee structure for the hospital has been established as follows:

Table 7: Fee structure Krong Kep RH

Activity	Fee (in CR)
OPD consultation	2,000
Paediatrics & IPD	30,000
X-ray	15,000
Echography	10,000
Delivery	40,000

Information on the fee structure had not yet been vulgarized, nor had the hospital put up a list with the fees for the patients to consult.

Health Action Groups established at Pagoda and Mosque

2.3 User fee levels determined

Determining the level of the user fees depends on a number of elements.

One important element is the willingness and ability of the patients (or the heads of household, or the mothers (?)) to pay. User fees should not be set at a level which either drives the patients (clients) to the private or informal sector nor should they be at a level where the majority depends on a possible health equity fund. Communities should therefore be involved in setting the levels. However, the information on the basis of which discussions with the community are held should come from well-organised surveys.

Another important element is the wish of to increase the income of the health personnel, or for that matter, of the health facility. It is in their interest to maximize the income from user fees and often that is interpreted as having maximum user fees.

It is the responsibility of the health authorities to design and manage a process in which the community concerns and health personnel wishes are aligned. A process which results in user fee levels which are affordable for the patient, acceptable to the health personnel and overall beneficial to the health system.

This process should have the following elements:

1. A survey to determine the willingness and ability to pay for healthcare;
2. An analysis of the costs of running the health care facility or system;
3. An analysis of the services offered by the health facility or system;
4. Various scenarios which show what would happen if patient levels or user fee levels change.

Based on the information resulting from these elements a user fee system can be designed and discussed with health staff and community leaders.

It is the experience in the case of other user fee systems that the higher the level of community involvement in determining the level of the user fees, the better the user fees are accepted by the population. In various instances, contracts are signed between all partners (including community representatives and the various levels of the health care system) to formalise the introduction of user fees.[12] In the case of the Kep RH no major restructuring has taken place.

2.3.1 Community survey

To establish the willingness and ability to pay it necessary to organise and conduct a survey. However, in this particular situation there is also a need to organise and conduct a base-line survey as well as a poverty assessment. It is proposed to organise one major survey which includes all elements.

Just in case this is not possible, an estimation has been made of the resources needed to conduct a poverty assessment in Krong Kep. See for this estimation Chapter 0

2.3.2 Costs of the health care services

To analyse the costs, the services offered have to be analysed. In the case of the Kep RH the fee structure is rather basic. Whether this is because few services are offered or because they decided to keep the fee system simple I do not know.

However, the hospital as well as the health facilities will have to make a detailed analysis of the direct and indirect costs of the services offered.

As one of the major changes in the system will be the presence of the staff there will be new elements introduced. These will have to be discussed, defined and costed and may include, amongst others:

- Overtime
- minimum/maximum number of hours per week
- shifts
- number of positions
- equity amongst staff
- health care and drugs for health staff workers and their families and other civil servants,
- transport costs,
- housing allowances,
- per diems
- and many other cost items.

Although the Kep RH does not offer surgical services it does offer quite a few other services as can be seen in the following table:

[12] Jacobs 2003

Table 8: RH activities and fees

Activity	Direct cost	Indirect cost	Total cost	Income
Adult admission				
Paediatric admission				
Emergency:				
Paediatric				
Surgery				
Referral to Kampot: including transport				
Fracture & POP				
Small surgery				
Wound dressing				
Wound re-dressing				
Delivery normal				
Complicated				
Curettage				
Sterilization				
Foreign body removal: general anaesthesia				
local anaesthesia				
Private room				
Referral HC by RH ambulance				
Send body home/Wat				
X-Ray				
ECHO				
LAB Urine				
Bacteriology				
Biochemie				
Serology				
Stool				
Malaria				
Medical Certificate public servants				
Birth certificate				

The table has not been filled in as the calculations for the direct and indirect costs have not been done.

2.3.3 Distribution of user fee income

As indicated above, 49% of the user fee income is to be distributed over the personnel. Practice shows that often more than the 49% is used to increase the bonuses. However, before payment of bonuses can take place a 'bonus scheme' has to be established defining who gets which bonus.

Various systems are in currently in place, from fixed bonuses to performance related bonuses and bonuses based on a pre-agreed point system.

All systems have advantages and disadvantages but the most acceptable system for the staff seems to be a point bases system which follows the same relative weights per position as the regular Government payment and grading system.

Which system is adopted should be decided in discussions with the health care staff.

Bed occupancy rate is used as a measure to establish levels of bonuses in some instances.

Experience has shown that team building is important to avoid that after some time the MD's are going to demand even higher payment than the nurses or lab staff etc. In the case of hospitals with surgical units this is an even more important point as the surgical interventions, and therefore the surgeons, bring in the majority of the income.

Although a system of distribution of the user fee income does exist at the Kep RH, the consultant was not able to get hold of a document describing it.

In paragraph 5.1 below, a calculation has been made to estimate the level of user fee income and what possible bonuses could be paid. In that example the distribution does follow the relative weights of hte Government grading system. However, that is only one way which can be used to calculate the bonuses and in practice this will not be the most accurate calculation. The Kep RH works with shifts and over-time so a system which will take this into account, as well as bed-occupancy rate, individual and collective performance, overall presence of the staff member etc. will be more accurate and more acceptable. This can only be done by the RH management and the ODO management.

It is suggested that a one or two workshop will be organised with as objective to produce an fair system which is acceptable to all staff. The latter point is important as experience has show that the better a system is accepted by the staff the more sustainable and succesfull it is.

Table 9: MoH and Kep RH personnel standards

Position	MoH standard[13]	Kep RH
Doctors	6	
Surgeons		0
Paediatricians		0
Obstetricians		0
Other		6
Medical Assistants	4	0
Dentist	1	0
Dentist Assistant	1	0
Dental Nurse	1	0
Pharmacist	1	0
Pharmacist Assistant	1	0
Secondary Nurses	12	5
Anaesthetic Nurse	0	0
Primary Nurses	8	6
Secondary Midwifes	4	1
Primary Midwifes	2	0
Nutritionist	1	0
Secondary Lab technician	2	0
Primary Lab Technician	2	0
X-Ray/Echo technician	2	0
Physiotherapist	1	0
Health Agent	0	0
Pharmacist prepa.	0	0
Secourist	0	0
Medical Traditional	0	0
Other		4
Sub-total health personnel	**49**	**22**
Cleaner		0

[13] Overtoom 2004

Position	MoH standard[13]	Kep RH
Laundry/washing		0
Kitchen		0
Ambulance Driver		0
Administrator		0
Accountant		0
Secretary		0
Clerical Staff		0
Maintenance Technician		0
Sub-total non-health		0
Total staff		**22**
Number of health staff/bed		**0.88**

3 Health equity funds

3.1 Introduction

The existence of formal user fees highlights the problem of access to health care. Although the National Charter clearly states that exemption methodologies have to be developed and applied, in practice these exemption schemes are often not effective.

This is the main reason that equity funds have come into existence, starting in Siem Reap.

Since the successful implementation of a number of pilot schemes, health equity funds have become an integral component in the National Poverty Reduction Strategy 2003-2005 and the Health Sector Strategic Plan 2003-2007.[14]

Health equity fund operate on the basis of the following principles:

1. They finance services in line with priorities within the MoH's policy framework;
2. Their benefits are directed solely to the target groups in question;
3. Their financing should ensure the development and improvement of public sector services and facilities and not be diverted to create parallel health service delivery outlets;
4. The development of financing systems should go hand in hand with strategies for quality improvement/assurance and performance regulation of designated facilities and services;
5. Objectivity is ensured in monitoring and evaluation of service delivery and fund management performance;
6. The vision of the forthcoming five-year period is to initiate the strategy through external financing that would later continue into a longer-term process co-financed with more credible levels of government funds.[15]

At present at least ten pilot schemes are functioning.[16]

[14] MoH September 2003
[15] Ibid.
[16] Ibid.

Table 10: Existing Health Equity Funds

	Place	Supporting organisation	Referral Hospital included	Health centres included	Who manages the HEF
1	Kirivong OD	EED	Y	Y	Pagoda's
2	Pereang OD	HNI			AFH
3	Phnom Penh	DfiD/Options UK			
4	Phnom Penh	MDM	Y	N	
5	Pur Sat province	WHO			
6	Sotnikum OD	MSF	Y	N	CFDS
7	Svay Rieng province	Unicef	Y	N	Equity fund support committee
8	Takeo provincial hospital	SRC	Y	N	
9	Takeo eye care hospital	Mary Knoll Mission	Y	N	
10	Thmar Pouk	HNI	Y	N	CAAFW

Source: various documents collected by the consultant

Other initiatives are 'under construction' or have been included in the MoH strategy paper, amongst others:

- WHO equity fund in Mongkol Borey provincial hospital;
- The University Research Company (URC) is going to implement equity funds in at least 4 provincial hospitals with USAID funding;

Over the period 2003-2007 the MoH hopes to set up equity funds in almost 30 districts around the country using a variety of funding: MoH/WB/ADB/DfID Health Sector Support Project, GTZ and the GFATM.

3.2 Necessary conditions to start a HEF

There are a number of conditions which have to be fulfilled to assure a successful HEF. These conditions have been compiled through interviews with key persons, studying the publications on HEF as well as the MoH strategy paper on HEF.

- Firm long term financial and funding commitment or as an alternative : it has to be clear what will happen with the equity fund once the commitment of the present donor comes to term;
- Staff trained in MPA and CPA modules;
- Reasonable level of activity in the hospital;
- Competition with private sector low;
- A functional Health Financing System using fully agreed distribution criteria (49% of the proceeds and how is this portion to be distributed amongst the personnel);
- Appropriate numbers of beds (according to MOH standards)
- Adequate human resources, both in quality and quantity, willing to actively promote the public health system;
- Sufficient infrastructure to absorb an expected increase of patients (in all situations where HEF have started functioning a marked increase of patients is seen);
- Management of HEF independent from management of health facilities or system.

If user fees are not only introduced in the hospital but also at health centres the relationship between the levels also has to be discussed and defined. Under which conditions can patients be referred and what consequences does that have for the user fees.

What expenses can an HEF possibly cover or reimburse :

- Hospital and health centre user fees: in percent increments or as a lump sum
- Transportation costs patient and caretaker (depending on whether a referral from HC is obtained)
- Board for the caretaker (board for the patient is financed by the hospital)
- Loss of income:
- Incidental expenses;
- Travel costs and user fees chronic patients (TB, AIDS etc.);
- VTC patients, PMTCT;
- Supplementary food for chronic patients, milk for babies;
- Cost or cremation;
- Home visits chronic patients, follow-up home visits poor patients.

Which expenses will be covered will depend on the results of the poverty assessment, costing analysis and discussions with all the stakeholders.

An HEF acts as a purchaser of health care for a clearly identifiable group of patients. The HEF therefore has a certain negotiating power to demand a minimum level of care in terms of medical quality, health staff availability and attitude, drug availability, cleanliness etc. In practice this means that quality standards will have to be defined and agreed upon between the HEF manager and the health facility manager. Over time these standards will have to be monitored on a regular basis.

3.3 Organisational structure HEF

How does the HEF organisation look and more importantly: who is responsible for what. The following list can serve as a guideline and start of discussion. There are no examples yet of HEF that have been initiated without external support. Although it may well be possible to manage a HEF without external support in the long term, the initial activities need funds. Not only funds to organise a poverty assessment and finance the HEF capital but also funds for the overall organisation, the community and other meetings, training session, close monitoring and follow-up and other yet unforeseen activities for which the ODO has not budgeted, or received, governmental funds.

Table 11: Responsibilities HEF

	What	Who
1	Organisation of the HEF	Donor, ODO and community
2	Identification of beneficiaries	ODO + donor + community representatives
3	Funding of the HEF	Donor
4	HEF management	community committee
5	Management of beneficiary data base	
6	Marketing of the HEF	community committe + ODO +Health staff
7	Health service delivery	Health staff

8	Auditing of HEF functioning	Donor, external agent
9	Auditing of health service delivery (regular and random)	Donor + ODO + (regular but at random checks)

3.4 Management of the HEF

One of the main issues is who could, or should, take the responsibility for the management of the HEF. It is obvious that the HEF management should not be done by the health staff of the facilities from which the HEF purchases health care, nor should it be done by the health authorities.

At present, no one manner has been agreed upon. The various existing pilot projects employ different methods.

In two cases a Cambodian NGO has been engaged for the identification of the beneficiaries as well as the management of the HEF. The advantage of this option is that locally available expertise is used and the accumulation of organisational experience and institutional memory benefiting the locally engaged NGO. The two NGO's which are presently active in this field are CAAFW and CFDS.[17] The disadvantage of this method is that it can be costly and that NGO's are not always available.

To counter this last disadvantage, one INGO has actively supported the creation of a local NGO. Its creation was specifically to work on identification of beneficiaries and HEF management. The local NGO is called AFH.[18] This is a second method to assure HEF management.

A third way is to work with a community based committee. Unicef has initiated this in Svay Rieng. They have used the existing Village Health Support Group network to manage the pre-identification. The Provincial Equity Fund Support Committe (PEFSC) manages the HEF. This committee has 11 members : 5 Pagodas, 2 NGO's, 1 Department of Social Affairs 1 Departement of Education, 2 Unicef. The committee monitors admission and hospitalisation , follows up on quality of care, manages the HEF funds and makes monthly payments to the hospital. They meet weekly with the hospital to determine the payments.

A fourth way has been initiated by Enfants & Développement. They have supported the engagement of the Pagoda committees. These committees do not only identify the beneficiaries and manage the HEF, but also fund the largest part of the HEF needs.[19]

In Kep there are no local NGO's which could be approached for the management of a local HEF.[20] The CAAFW is only active in the north-western part of the country. CFDS may be a possible contractor. However taken into account the size of the Kep it is doubtful whether

[17] CAAFW: Cambodian Association for the Assistance to Families and Widows active in Banteay Meanchey Province in Northwest Cambodia.
CFDS: Cambodian Family Development Services active in Siem Reap with MSF
[18] AFH: Action For Health active in Prey Veng in collaboration with HNI
[19] This system has been in place since July 2003 and the external financial contribution during the first six months is a mere 500 Usd.
[20] The office of the Cambodian Red Cross in Kep was approached. However, the consultants were told that the Red Cross has other priorities.

contracting-out the HEF management to a organisation outside of the OD is financially viable and it is certainly not financially sustainable in the long term.

For the same reason it does not seem to be viable to initiate and support the creation of a local Kep based NGO for the sole purpose to work with the HEF.

That leaves the option to work with a broad based community committee or with the Pagoda committees.

There is a possibility to organise a broad based community committee but not with a similar composition as in Svay Rieng. In Kep, CIH does not have a permanent representation and no local NGO's exist. Another difference is that in Svay Rieng the PEFSC's work is limited to the hospital. In Kep the three health centres will also be included. A broad based community committee is definitely a possibility which should be explored.

The Pagodas have always played a central role in Cambodian society. Around the Pagodas social, religious and welfare activities are organised, often on village level.[21] The Pagoda receives, manages and distributes donations. Its committee usually has between 5 and 7 members, including the Pagoda Abbot, the elected Achaar and Chas Tom.[22] The Ministry of Planning has recommended the Pagodas as key partners for community development.[23] In Kep there are 6 pagodas covering 18 villages. Three pagodas could be invited to manage the HEF for each one of the three health centres and a fourth pagoda can be asked to do the same for the RH. The sustainability seems to be ensured this way and in the long term financial sustainability may even be a possibility depending on the financial health of the Pagodas.

Incentive: free health care for committee members (not for the members of their household though). Which committees…

3.5 HEF payment system

The HEF payment system can be organised in a simple and straight forward way once all eligible families have received an exemption card. Booklets can be introduced containing sequentially numbered 'completed treatment forms' in duplicate. The procedure would be as follows:

- a patient with an exemption card presents him/herself at the health facility
- the patient is treated and given a 'completed treatment form'. On that form the name of the patient is indicated, the number of the exemption card, the date of the treatment and the nature of the treatment. Books with pre-printed forms, sequintially numbered, are distributed to the health facilities by the HEF;
- The patient takes the form (of which the duplicate copy is kept by the health facility) and gives it to a representative of the HEF at his/her village (or pagode or …);

[21] Jacobs 2003
[22] Achaar are former monks and Chas Toms are respected elders who have never been monks
[23] Ministry of Planning. 1999. Cambodian Human Development Report 1999: Village economy and development. Phnom Penh: Ministry of Health

- once a month the HEF representatives meet with the health facility and the forms are compared;
- the HEF representatives and the health facility manager agree on the forms and the HEF proceeds to payment (within one week of agreement, preferably on bank or credit union account. If possible the HEF should avoid to travel with cash from facility to facility).

3.6 Other issues

An information campaign should be devised to market the HEF. If a pre-identification exercise is going to take place this could be an important part of the information campaign but will have to be followed up especially during the first 12 months.

A HEF is complementary to the regular exemption system. HEF should not be paying for monks, and other accepted categories which are clearly defined in the 1996 Health Charter. The only basis for HEF acceptance is level of poverty.. The costs of the regular exemption system are born by the health facility.

Whether patients coming from outside the OD would have access to the HEF is an issue that will also have to be discussed. This is a possibility if combination of pre-identification and facility based system is used.

Another final issue to be discussed is that of the patients with the chronic diseases.

4 Monitoring of user fees and health equity fund impact

Depending on what kind of user fee system is adopted, certain checks and balances have to be build in the system to avoid that the facility will over- or under-prescribe or treat to maximize the facilities' income.

Together with the health authorities and community representatives an indicator based monitoring system will have to be developed to ensure that the quality of care (however defined or expressed) will not go down over time.[24]

This system should include the quality of medical care provided but certainly also matters as presence, respect for the rules of the system and attitude towards patients.[25]

The table below gives an example of a basic monitoring system.[26] The indicators in the table are not fully defined and would need more detail before they can be used as indicators.

Table 12: An example of quality standards

Service/Management aspect	Quality Indicator	Means of verification
Internal regulations	Personnel present during working hours	Signature in register
24 hrs availability of the various services	Personnel present for duty hours on-call for diagnostic services	Duty roster in departments Signature in register
Emergency Services	Treatment without delay	Patient chart noting time Duty roster Signature in register
All departments and facilities	Treatment according to MoH protocols	Patient chart
	People treated with respect	Exit interview Follow-up in the community
	Waiting times shorter than e.g. 30 minutes	Exit interview Follow-up in the community
In-patient departments	Indicator for nursing care	Patient chart Exit interview Follow-up in the community
Medicine/ Paediatrics/ Maternity	Patient informed on the disease s/he has, what treatment is, what options, how to take medication, etc.	Exit interview Follow-up in the community
	Patient informed how to prevent reoccurrence of the disease: Health Education (where applicable)	Exit interview Follow-up in the community
TB/AIDS	No discrimination Good nursing care Active co-operation with caretakers	Patient chart Exit interview Follow-up in the community
Diagnostic Services	Appropriate indication (no over- and no under- prescribing)	Random check of x diagnosis and prescriptions
Laboratory services	Results available within e.g. 24 hours All exams registered Guarantee of confidentiality HIV testing	Registered test in and out times Registers in lab Exit interview & follow-up in community
X-Ray and ultra-sound services		Patient chart Monthly visits by EFSG

[24] Care should be given developing a system with SMART objectives: Specific, Measurable, Achievable, Realistic and Time-limited.
[25] MSF 2001
[26] Adapted from Overtoom 2004

Service/Management aspect	Quality Indicator	Means of verification
Infection control & hygiene in the hospital compound	Cleaning protocols for the different departments Hospital compound neat & clean Incinerator area clean, no infective materials Toilets clean and no bad smell	Daily signing off by cleaning teams on cleaning protocol sheets for the different areas Monthly visits & reports on compound, incinerator, toilets, etc.
Referral Services	Personnel on duty monitors the radio/telephone 24 hours (in Emergency Ward)	Duty roster, signatures Interview of HC staff on supervision visits
	Referrals well-documented Feed-back to HC staff	Records in RH and HC correspond Interview with HC staff Feed-back slips in HC records (supervision visits)
	At least 90% of patient satisfied with this service	Exit interview Follow-up in the community
Food for the patients	Administration of budget & procurement of food, fuel, cooking utensils accessible and balanced. At least 2 meals per day per patient (Number of patients/number of meals) per month	Register book for budget of MOH (1000Riel/patient), income through Equity Fund Cashbook kitchen personnel Spot check by EFSG of kitchen, check meals

Theh experience of other organisations has shown that the monitoring is one of the most important and cost-effecitve ways to assure a minimum level of quality of care.

5 Possible outcomes of the introduction of user fees and health equity fund

5.1 User fee income for the Krong Kep RH

It is advisable to work through a few scenarios before the introduction of the user fees. Without scenarios it is hard to set targets or even hard to know what to expect. To my knowledge no income/cost/bonus scenarios were developed by the hospital or the ODO before the introduction of the user fee system. No targets have been defined either.

The key question that has to be answered is whether it is realistic to expect the user fee system to significantly contribute to the operational budget. This is determined by a number of factors:

- the number of patients that will continue to use the RH's services
- the range of services offered by the RH
- the fees that are charged for the services

In addition the expectations of the RH management and staff will also have an influence on the outcome.

In this paragraph one possible outcome of the user fees system is presented. It is based on the following premises:

- the use of the services in 2004 is the same as in 2003;
- the range of services does not change.

In addition the information in Table 13 is used for the calculations .

Table 13: General data for the calculation of user fee income

Indicators & info:			Activity	Fee in CR
Population Kep:	36,592		OPD consultation	2,000
Exchange rate Riel/Usd:	4,000		Paediatrics & IPD	30,000
User fee income: salaries	49% of total		X-ray	15,000
User fee income: running costs	50% of total		Echo (Sonogram)	10,000
User fee income: treasurie:	1% of total		Hospital delivery	40,000

Assuming that the HIS data that were provided by the RH and the ODO are correct, the following table shows estimations for the annual fee income:

Table 14: Estimated annual fee income Kep RH

	HIS data	Fee in CR	Annual fee income
OPD consultation new cases	8,734	2,000	17,468,000
Paediatrics & IPD	715	30,000	21,450,000
X-ray	119	15,000	1,785,000
Echo (Sonogram)	67	10,000	670,000
Delivery	119	40,000	4,760,000
Total			**46,133,000**

Over one year, the RH can expect an income of 46,133,000 CR assuming that the use of its services remains the same as it was in 2003.

Only part of that income (49% or 22,605,170 CR) can be used as salary supplement: bonuses. The next matter is as to how to distribute this amount over the RH staff, or in other words, how to calculate the different bonuses. There are different ways to calculate the bonuses as is indicated in paragraph 2.3.3 o page 12.

Here we are using a very straight forward method. We will use the relative weights of the MoH salaries as the basis to calculate the bonuses.

The next table shows the MoH budgets per position. When we define the MoH budget for a cleaning position (the lowest position) as 1 unit, we can express the other positions in multiples of these basic units.

For example: The MoH budget for the salary of the director is 5.51 times that of a cleaning position so the directors position has a weight of 5.51 basic units. The last column in the table below shows the total number of units per functional group. For example: 5 medical doctors * 5.62 units = 28.08 units.

The total number of units for the RH is 65.09.

Table 15: Budget per position at Kep RH and relative weight positions

	Number of positions	MoH budget per position	Basic salary units Relative weight	Total units per group
Director	1	1,719,600	5.51	5.51
Medical doctors	5	1,752,000	5.62	28.08
Secondary nurses	4	1,142,400	3.66	14.65
Secondary midwife	1	1,142,400	3.66	3.66
Primary nurses	1	708,000	2.27	2.27
Medical aids (?)	4	432,000	1.38	5.54
Driver	1	432,000	1.38	1.38
Cleaner	4	312,000	1	4.00
Total	**21**			**65.09**

Now that we know the relative weight for each position expressed in basic units we can calculate the bonus for each position. We know that 49% (or 22,605,170 CR) of the annual user fee income can be used to supplement the staff income.

Based on those data the following table shows how to calculate the bonus per position :

Table 16 Example of bonus calculation

Position	What	Data	Annual bonus
	Annual user fee income =	46,133,000 CR	
	49% of annual user fee income =	22,605,170 CR	
	Amount to be distributed over staff =	22,605,170 CR	
	Total staff expressed in	65.09 basic units	

Position	What	Data	Annual bonus
	basic units =		
Director	*Weight of director position*	*5.51 basic units*	
	Annual bonus calculation	*5.51/65.09 times 22,605,170*	*= 1,914,152 CR*
Secondary nurse	*Weight of secondary nurse position*	*3.66 basic units*	
	Annual bonus calculation	*3.66/65.09 times 22,605,170*	*= 1,142,400 Cr*
Medical Doctor	*Weight of MD position*	*5.62 basic units*	
	Annual bonus calculation	*5.62/65.09 times 22,605,170*	*= 1,752,000*

For all positions the outcome for this particular scenario is shown in the following table:

Table 17: Possible salary and bonus scenario Kep RH

	User fee income per position per annum in CR	Regular salary per position per annum in CR	Total per position per annum in CR	Total per position per annum in US$	Total per position per month in US$
Director	1,914,153	1,719,600	3,633,753	908	76
Medical doctors	1,950,219	1,752,000	3,702,219	926	77
Secondary nurses	1,271,649	1,142,400	2,414,049	604	50
Secondary midwife	1,271,649	1,142,400	2,414,049	604	50
Primary nurses	788,102	708,000	1,496,102	374	31
Medical aids (?)	480,876	432,000	912,876	228	19
Driver	480,876	432,000	912,876	228	19
Cleaner	347,299	312,000	659,299	165	14

Athough it is clear from this table that the salaries of all staff are more than doubling (111% augmentation) the overall results is not impressive. The monthly salaries of the director and the medical doctors will still be significantly below 100 US$ and the monthly contribution from the user fee system to the bonuses ranges between 7 US$ (for a basic unit : the cleaner position) to 41 US$ (medical doctor).

These amounts are quite low especially compared with bonuses paid in operational districts where a well functioning user fee system is in place. Monthly bonuses of 200 US$ are not exceptional for medical doctors.

The reasons why the bonuses are low in this calcution are the following :

- the assumption that the use of services does not increase. There is however an expectation on the side of the RH management that the use of the RH will increase as the quality of service delivery will go up;
- the range of services offered does not include surgical services which could significantly contribute to the user fee income;[27]
- the catchment population is quite small and the number of beds is small. Even if the bed occupancy rate goes up the income may not rise significantly;
- the ratio personnel/bed is 22/25 = 0.88 which may be lower;[28]

[27] In the case of Takeo hospital for 2003 the surgery represented 49% of the total user fee income.
[28] Takeo: staff/bed ratio 0.68

The assumptions underlying the calculation can be changed. In the following table differnet outcomes following different assumptions are presented.

Table 18: Monthly bonuses under different assumptions

	Assumption	Range of monthly bonuses in US$
1	OPD down 50%	12 - 69
2	Bed occupancy 50% down + OPD 50% down	11 - 60
3	Bed occupancy 100% + OPD 50% up	18 - 101
4	99% user fee income to bonuses	21 – 119
5	99% to bonuses + bed occupancy 100% + OPD 50% up	30 - 167

The first outcome assumes that the number of OPD patients goes down significantly. This is not entirely unrealistic if and when a fourth health centre (which will be the closest one to the hospital) will open. In addition, in future there may be a working referral system which actively discourages patients going directly to the RH.

The second assumptions shows the results in case the main indicators go down. The third assumption shows the results when, through quality improvement, all indicators go up. Bed occupancy rate has been calculated as : (20 beds * 365 days) / 5.5 days average stay.

The fourth assumption shows the results in case all indicators remain the same as in 2003 but 99% of the user fees is used to pay bonuses. This goes against Government policy but it is not uncommon. The fifth assumption obviously produces the best results.

So far the calculations have been made on the basis of what funds are available and how to distribute them. The issue can also be approached from a different angle : define a minimum acceptable wage for the basis unit and then calculate what is needed to pay the bonuses.

This calculation is done for the entire operational district. The table below includes bonuses for the health centres as well as for the operational district office employees, a total of 72 employees. The main assumption here is that the minimum monthly bonus is 30 US$ for the cleaning position (= the basic unit). All other bonuses are calculated using that basis and the relative weights of the government grading system.

The 2003 HIS data are used and it is assumed that 99% of the user fee income will be used for bonus payment.

Table 19 User fees for entire OD

		RC	USD
1	**Needed for bonus payments**	147,622,154	37,278
2	**Needed as user fee income (1/99%)**	149,113,287	36,906
3	**Actual health centre user fee income:**	31,931,636	7,983
4	**RH user fee income:**	46,133,000	11,533
5	**Deficit 1-3-4 =**	71,048,651 (48%)	17,762

This scenario is not possible without a substantial increase in the use the population makes of the health services. The deficit is 48%.

In annexes through a number of excel files are presented with various scenarios and calculations.

It is strongly recommended that the CIH support supports the ODO in developing realistic scenarios along the lines as presented in this chapter.

5.2 Costs of a health equity fund for Krong Kep RH

There are two main costs associated with a health equity fund. One are the costs of managing the HEF and the other are the costs that are needed to purchase health care for those who qualify for support.

The calculation of the latter costs is straightforward. According to national poverty data, the poverty rate in Krong Kep is 48%. We assume that this percentage can be taken as a proxy for the number of people that will need support from the HEF. We also assume that the HEF reimburses all fees for those that qualify. In this calculation example no differentiated reimbursement is assumed.

In Table 14 the user fee income is estimated at 46,133,000 CR, using the 2003 HIS data and the actual RH fee system.

The HEF would in that case have to reimburse 48%*46,133,000 CR = 22,143,840 CR over one year. This is the equivalent of 5,536 US$.

Even in the case all HIS data would double, the HEF reimbursements would hardly exceed 11,000 US$ which is 0.30 US$ per capita.

In regards to the costs of running the HEF it is more difficult to make estimations. The main reason for this is that no choice has been made as to what form the HEF management is going to take. Using full-time administrators is obviously more expensive than a volunteer community committee or to run the HEF management via the Pagoda organisational structure.

However, having said this, it should be possible to assure HEF management for less than 250 US$ per month for the first two years. This would result in management costs which are more than 50% of the reimbursements. Although this is too high for the long run it may be necessary to make these investments in the short run. In case the partners decide to implement the HEF while the final model is still not decided upon it will assure that the HEF can function while simultaneously developing the optimal management model.

Table 20: HEF costs for one year based on the data in Table 14.

	CR	US$
Reimbursements	22,143,840	5,536
Management costs	12,000,000	3,000
Total	34,143,840	8,536

5.3 External contribution to staff bonuses

Referring to the amounts that are show in paragraph 5.1 above it seems to be obvious that the user fee income will not be able to provide an instantaneous solution to the low staff salaries.

This can become part of a vicious circle where it takes too long for the user fee income to increase therefore the bonuses remain low which may negatively affect the staff's motivation which in turn has an effect on how the patients perceive the quality of care (or even the actual quality of care) so the attendance numbers will go down causing the user fee income to decrease even more and so on and so forth.

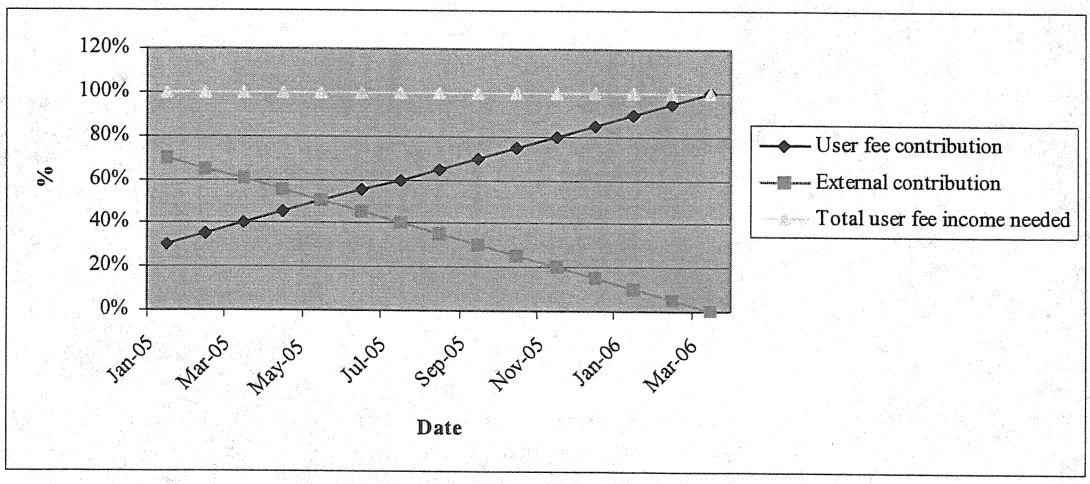
This vicious circle can be avoided by an intense information campaign informing the patients of the 'new conditions'. We are assuming that with the introduction of user fees there will be a significant increase in the quality of care in such a way that this is also recognised and realised by the patient.

Increasing quality of care, however, is a process and will, also in Kep, take some time.

One direct way to shorten the process and to assure that motivation of the health staff is guaranteed is for CIH to fund salary or bonus supplements. The main argument is that the health authorities and CIH can in this case immediately start demanding a perfect attendance record and 24/7 presence in the facilities. This in turn will have an almost immediate effect on patient attendance.

In the graph below an example is given using percentages instead of actual financial data. The graph shows the total user fee income needed to pay minimum staff bonuses at 100%. The actual user fee income is set at 35% at the start of the process. The external contribution at that moment is 65%. The graph shows that over a period of 15 months the user fee income increases to 100% and that in March 2006 no external contribution is needed.

Figure 1: Total income, user fee income, external contribution



Based on the estimations presented in Annex 4 the cost of the external support to the bonus system would come to approximately 15,500 C$ for a 15 month period (or 1,033 C$ per month). If the 24/7 presence is taken into account it is safe to assume that this amount has to be increased with 50% to 23,250 C$ or 1,550 C$ per month.

It is up to CIH with its partners to decide whether this is the best strategy to choose.

6 Identification of the poor

6.1 Identification and criteria

Currently there are various ways that are used to identify the poor. The main two systems are:

1. Facility based system: upon presentation at the facility the patient is interviewed using a standard questionnaire and it is decided whether support can be given;
2. Pre-identification system: Identifying the poor through an out-reach program and providing them with health cards or exemption cards that are presented to the health staff at the health facility whenever care is needed.

The facility based identification system has a number of disadvantages: many poor are not reached as they are not aware of the HEF or because they are not sure of their entitlement.[29]

The consensus amongst the organisations working with a HEF seems to be that a pre-identification system is the most equitable.

When a family is reached it has to be determined whether it qualifies for support by the Health Equity Fund. For this a number of criteria can be used. These criteria can be classified as primary and secondary criteria. An applicant would for example have to fulfill all the primary criteria and at least one of the secondary criteria.

One can distinguish four groups within a population:[30]

- Rich = Mean
- Medium = Kuesam
- Poor = Kraa
- Extremely poor = Toal

Criteria used to determine whether someone is poor can include the following:

- House owner or tenant
- If house owner: housing conditions: made of thatch, stone, clay, mud, brick, concrete, roofing singles etc.
- Daily income: less than 4,000 CR
- Land ownership: less than 0.5 hectare
- Animal husbandry: no or few animals (a difference can be made between between cow, pigs, goats, chickens etc.)
- Assets: no or few assets (to identify which ones)
- Family size: more than 7 dependents

Which criteria should be used in the Krong Kep districts should be determined through discussions with the health authorities and community representatives.

[29] See also Lankers 2003 page 13
[30] Hardeman 2004

6.2 Budget for pre-identification

The assumptions are a population of 36,592 and a poverty rate of 48%.[31]

1. Discussions with ODO, Pagodas, village chiefs and village health support groups to explain HEF, poverty criteria and pre-identification:

   5 working days, including two one-day workshops.

2. Verification of poverty level:

   - Preparing preliminary list with families through collaboration with village chiefs, pagoda's, VHSG and others:

     15 working days

- Form and train teams to visit interview and verify preliminary lists to establish final list:

  2 working days

- Actual visits by teams;

  40 working days

3. Establishing a computer data base and issuing Exemption Cards[32]

   35 working days using two computers, two data entry clerks

4. Distribution of Exemption Cards

- Via the Pagoda's, village chiefs or other administrative authorities. Or villages can be visited and they can collect them from a certain point: school, market, health centre.

  5 working days

This gives a total of 102 working days.

Based on the information in the following table a possible budget is presented in Table 22.

Table 21: Various data for pre-identification exercise

Population	36,592
Average family size:	5
Number of families	7,318

[31] Ministry of Planning and MoH December 2002
[32] "Ban anoukrouh" or "Ban lek leng"

Poverty rate:	48%
Number of poor families:	3,513
Number of families interviewed per day:	20
Days needed:	176
Number of teams:	4
Sequential number of days for id exercise:	44
Daily computer entries:	50
Number of computers:	2
Total number of days for data entry:	35

Table 22: Possible budget for pre-identification

Budget for pre-identification (in USD)	Number	Days	Fee	Total
Personnel				
Co-ordinator	1	102	12.50	1,275
Team leader	4	50	7.50	1,500
Team members	8	50	5.00	2,000
Per diem: food	12	50	1.50	900
Data entry clerk	2	40	5.00	400
Sub-total				*5,550*
Office costs				
Computer rental	2	40	4	320
Digital photo camera rental	1	60	2	120
Office sundries (paper/printing/etc.)	1	1	1,000	1,000
Sub-total				*1,440*
Transport				
Rental Motodup	4	50	5	1,000
Gas and maintenance	4	50	2	400
Sub-total				*1,400*
Miscellaenous				
Preparatory meetings	4	1	100	400
Sub-total				*400*
Total budget:				**9,315**

Four teams of three members each would go out and interview the identified families. The total cost is 9,315 US$ which is 0.25 US$ per capita for the OD.

7 Community participation

The importance of community participation is underlined by the MoH in its Guidelines for the developing operational districts and in the Charter on health financing.

The Village Health Support Committees (VHSC)as well as the Health Centre Co-Management Committees (HCCMC) have been created to ensure community participation. In addition there are Feedback Committees (FBC) although they seem to have been replaced by the VHSC's.

The presence of a HCCMC and a FBC are a pre-requisite to have a user fee scheme approved by the MoH. It is not clear whether any hospital related community based committees have been involved in the introduction of the user fees at the RH.

Whatever the case, any community participation is more likely to succeed when it is based on existing community structures then when it is based on externally created institutions according to experiences in other operational districts.[33]

It was indicated by the ODD that before the introduction of user fees on the health centre level consultations would be held by community representatives.

Unfortunately the mission was not able to analyse the community structures that exist in Krong Kep nor can it be confirmed whether the VHSC or the HCCMC have been organised or are functional.

[33] Jacobs 2003

8 Conclusions

All the conditions for a succesfull intervention in Krong Kep are present : supportive health authorities, motivated staff and accessibility of health facilities and population.

There are however a number of disadvantages in regards to the introduction of a user fee system and a health equity fund. It is not clear, for example, what the relationship is between the RH and the Kampot regional hospital or the other accesible second category hospital. This issue will have to be addressed and a referral system will have to be developed and implemented.

One of the main sources of income of the RH is its OPD section. However, if a 'penalty' is instituted for going directly to the OPD as opposed to going to a health center first, there may not be enough money to pay for hospital bonusses. At present patients use the OPD as a health center. This is an issue that should be discussed in detail with the ODD : what exactly are his long-term plans for the organisation of the health care delivery structure.

What to do with patients coming from outside the OD? Full payment? This would be good as if it is based on an increasingly good reputation of the Krong Kep health services. It would mean extra income for the entire system.

The user fee system that has been introduced in the RH in January 2004 shall have to be reviewed in detail in collaboration with the ODO accountant.

The calculations in the previous chapters show that user fees cannot be expected to immediately significantly increase staff bonuses. However, the introduction of a HEF may increase attendance and therefore increase the user fee income. Nevertheless one should be conservative in the calculations as an increase of the user fee income, in whatever way, will not be realised within the next 6-12 months.

What are next steps that CIH may take to contribute to a successful introduction or continuation of a user fee system as well as a HEF in Krong Kep.

1. Costing exercise for ODO, RH and health centres to determine in detail the direct and indirect costs of the overall health care delivery system in Kep as well as for all individual facilities and activities;
2. Undertake a poverty assessment, either as part of a baseline survey or as a stand alone, depending on the overall planning of the CIH intervention;
3. Propose, for the initial period, a CIH managed HEF
4. Together with the NCHP and a representative team from the ODD:

- Develop a detailed description of the user fee system to assure that the system is transparent and that all issues are part of it;
- Develop a detailed remuneration model for all health workers;
- Develop a detailed description of a HEF and cost it over a period of three years;
- Establish regular lines of contact with community representative organs;
- Organise information sessions on the user fee system and HEF
- Organise long term HEF management

The main resources that are needed are relatively small.

- One would need one external (=not from Krong Kep) expert in the field. This expert could come from NCHP or could be recruited directly by CIH. It could also be a non-Cambodian expert. It all depends on availability. The key is to have someone who can work full-time in Krong Kep and concentrate on user fees and HEF;
- A full-time experienced translator in case of a non-Khmer speaker;
- A period of 6 months from the start of the process to the moment that the HEF can be operational;
- Poverty assessment: C$ 15,000
- Health equity fund: C$ 15,000
- Possible salary supplement: to be determined

Based on the experiences from other interventions in Cambodia it is strongly advised to hire experienced experts for a period of at least 6 months that have clearly defined terms of reference. Although it has not been successfully tried, it may be possible to run a HEF without external support present. This would however be in the medium term: after 12 months.

The Cambodian partners are ready and are willing to enter in a long-term partnership.

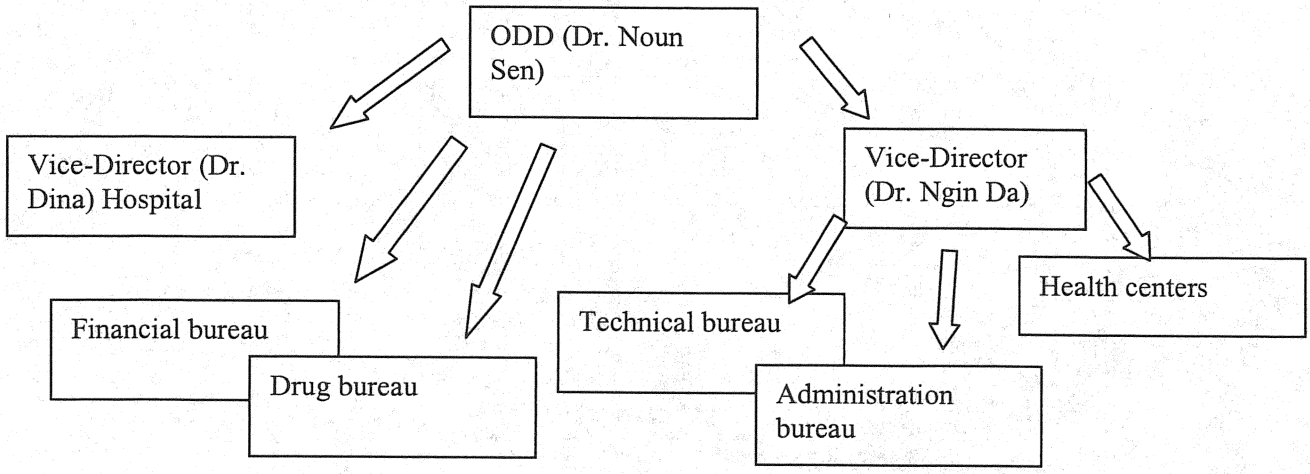
Ed Vreeke
Toronto 12 April 2004

Annex 1 Operational District Office Krong Kep

The organisational chart of the ODO is presented in the following diagram. The OD office is run by a Director who is assisted by two Vice-Directors. Apart from the overall responsibility, the OD director has the direct responsibility for the financial and drug bureaus within the ODO. The management of the hospital is the responsibility of a vice-director who functions as director of the hospital. The other vice-director is responsible for the management of the health centers and the functioning of the technical and administrative bureau. The four bureaus within the ODO: the financial bureau, the drug bureau, the technical bureau and the adminstration bureau are all headed by a chief.

The ODO employs 26 staff. The number of staff in the ODD is 72.

Table 23: Organisation chart OD Office



Annex 2 Human resources guidelines

Table 24: MoH standards for human resources in a referral hospital

	Category	RH	HC
1	Medical Doctor	6	0
2	Medical Assistant	4	0
3	Dentist	1	0
4	Dentist Assistant	1	0
5	Dental Nurse	1	0
6	Pharmacist	1	0
7	Pharmacist Assistant	1	0
8	Secondary Nurse	12	1
9	Anesthetic Nurse	0	0
10	Primary Nurse	8	3
11	Secondary Midwife	4	1
12	Primary Midwife	2	1
13	Nutritionist	1	0
14	Secondary Lab. Technician	2	0
15	Primary Lab. Technician	2	0
16	X-Ray/Echo Technician	2	0
17	Physiotherapist	1	0
18	Health Agent	0	0
19	Pharmacist prepa.	0	0
20	Secourist	0	0
21	Medical Traditional	0	0
	Sub-total health personnel	49	6
22	Cleaner	3	1
23	Laundry/Washing	2	0
24	Kitchen	2	0
25	Ambulance Driver	1	0
26	Administrator	1	0
27	Accountant	1	0
28	Secretary	2	0
29	Clerical Staff	4	0
30	Maintenance Technician	2	0
	Sub-total non-health personnel	18	1
	TOTAL	67	7

Source: Source: Guidelines for the development of ODs, MOH 19997

The ODO has one overall director, two vice-directors and four Heads of bureaus.

Table 25: ODO management

Name	Position	Responsibilities	Training
Mr. Man-Sothy	Director	- Drug supply bureau - Financial bureau	Pharmacist
Dr. Ngin-Nginda	Vice-director	- Technical bureau - Administrative bureau - Health centres	Medical doctor
Dr. Nnoun-Seng	Vice-director	- Referral Hospital	Medical doctor
Mr. Pen Un	Head of bureau	- Financial bureau	

Name	Position	Responsibilities	Training
Naroth			
Mr. You Lang Thon	Head of bureau	- Administrative bureau	
Mr. Ouk Sovan Narong	Head of bureau	- Drug supply bureau	
Mr. Lieng Ka	Head of bureau	- Technical bureau	

Source: Meeting with ODO management

Annex 3 Factors that limit access to health care for the poor34

Health center:

Limiting factor	Remedy
No cash or overall too poor	- HEF
Not familiar with facilities Fear of institutions Not knowledgeable as when to go to a health facility (stage or seriousness of disease)	- Get VHSG members/VHVs involved
Uncertainty about what the health facility has to offer: - What services are available - What are the prices - What are the criteria to qualify for the exemption system Patient does not know how the reception by HC personnel will be Patient not familiar with the opening hours or even whether personnel is available	- Health education - Promotion/advertising/marketing of HC services as well - as of the exemption system - Clear posting of fees & exemption system in HC - VHSG members give info to villagers on HC services - Duty or call system for 24 hours presence of health workers
Perception that Public Health Centres offer low quality services Private sector services are perceived to be more attractive - Private sector: treat according to wish of patient - Khru Khmer: traditions & beliefs - Market: treatment according to budget & wish	- Increase quality of HC services - Health education in HC - re. appropriate treatments, Essential Drugs, etc. - quality of treatment by professionals in the - Public Health System
Distance to HC	- Health education: change health seeking behaviour - Regular Outreach Services

Hospital:

Limiting factor	Remedy
No cash or overall too poor (for treatment and transport)	- Exemption system - HEF - Village Emergency Fund, etc.
Nobody to look after the rest of the family (in case a child is sick one parent has to go with the child)	- Community has to organize to take care of the rest of the family
Lack of referral system from village to HC/hospital	- Organise 'Village Emergency Referral System' - Arrange radio communication with referral system - Improve the (road) access
Lack of referral system from HC to RH (RH staff do not monitor radio at night, if radio available)	- Arrange referral system/radio communication from HC to RH - Arrange 24 hr monitoring of radio by RH personnel
Hospital far from village/ bad road / long travel time security at night (in certain areas & only in case of an emergency)	- Health education-change health seeking behaviour - Improve road access - Radio in means of transport (?)
Don't know how (don't dare) to go to the Hospital	- Involve FBC members/VHVs to facilitate access

[34] Adapted from Overtoom 2004

Limiting factor	Remedy
Lack of knowledge/uncertainty re. disease (when is it time to go) prices, exemption system, equity fund reception by hospital personnel	- Health education - Promotion/advertising of Hospital services & prices for services, advertise equity fund - Clear posting of fee levels, role VHSG
Low quality of services in public hospitals Attraction of private sector services Private sector: treatment according to wish & beliefs (injections, i.v. fluids, corticosteroids, diazepam, Lasix, Vitamin C-i.v., etc.) No waiting time, can get injections/i.v. fluid without being admitted Payment in instalments is possible* Khru Khmer: traditions, beliefs Market: treatment according to budget	- Increase quality of services in public hospitals - Health education - re. Proper treatments, Essential Drugs policy, etc. - quality of treatment in Public Health System and - information on medicines and their side-effects - Better organization of work (limit waiting times/ - delay in treatment) - Exemption/Equity Fund for poor, NGO providing - micro-credit for not-poor without cash at hand
Delayed treatment in Emergency Ward	- Special Buffer Cash for such incidents (patient/relatives sign to pay later)

Payment in instalments is only offered in the private sector.

Patients access the Public Health System often as a second/third/last option when the health of the patient has deteriorated.

It depends on the illness/disease/emergency what the patient will do.

When the patient has no money any more or is deteriorating outside the competence of the PP, the patient will be asked to leave for the public health system or go home to die.

So in great lines the following factors play a role in the delay and choice:

1. Knowledge of the patient (re. diseases, services & prices in the Public Health facilities)
2. Time of the day in case of an emergency (insecurity, lack of transportation at night)
3. Kind of illness (emergency, sub-acute, chronic)
4. Financial resources (poor, availability of cash)
5. Problem solving capacity (improvise in case of an emergency, community organization)
6. Infrastructure (roads availability/condition, travel time)
7. Traditions, beliefs (infusions and injectable medicines are preferred, Khru Khmer)
8. Influence of other health service providers (promotion of private, traditional, market, etc.)

Annex 4 OD user fee income need : basic unit = 1,440,000 CR per year

Table 26: OD user fee income need with basic unit at 1,440,000 CR a year

Basic unit annual salary MoH	312,000
Target for basic unit:	1,440,000

			Salary	Basic units per position	Target bonus	Total income	(in USD)
ODO	OD Director	1	1,968,000	6.31	9,083,077	11,051,077	2,763
	Deputy director	1	1,750,800	5.61	8,080,615	9,831,415	2,458
	You len thom	1	1,407,600	4.51	6,496,615	7,904,215	1,976
	liemg ka	1	1,600,800	5.13	7,388,308	8,989,108	2,247
	pen unmaruth	1	1,094,400	3.51	5,051,077	6,145,477	1,536
	ouk sovanarong	1	1,084,800	3.48	5,006,769	6,091,569	1,523
	Other staff	6	6,494,400	3.47	4,995,692	11,490,092	2,873
	Other staff	6	7,128,000	3.81	5,483,077	12,611,077	3,153
	Other staff	6	4,512,000	2.41	3,470,769	7,982,769	1,996
	Other staff	2	2,268,000	3.63	5,233,846	7,501,846	1,875
		26					
Hospital	Director	1	1,719,600	5.51	7,936,615	9,656,215	2,414
	Medical doctor	5	8,760,000	5.62	8,086,154	16,846,154	4,212
	Secondary nurse	4	5,712,000	3.66	5,272,615	10,984,615	2,746
	Secondary midwife	1					
	Primary nurse	1	708,000	2.27	3,267,692	3,975,692	994
	Other medical	4	2,160,000	1.38	1,993,846	4,153,846	1,038
	Driver	1					
	Cleaner	4	1,248,000	1.00	1,440,000	2,688,000	672
Okrasa	Director	1	1,098,000	3.52	5,067,692	6,165,692	1,541
	Medical staff	1	1,066,000	3.42	4,920,000	5,986,000	1,497
	Medical staff	1	540,000	1.73	2,492,308	3,032,308	758
	Medical staff	1	432,000	1.38	1,993,846	2,425,846	606
	Medical staff	1	432,000	1.38	1,993,846	2,425,846	606
	Cleaner	2	624,000	1.00	1,440,000	2,064,000	516
Pong Tak	Director	1	990,000	3.17	4,569,231	5,559,231	1,390
	Medical staff	1	498,000	1.60	2,298,462	2,796,462	699
	Medical staff	1	570,000	1.83	2,630,769	3,200,769	800
	Medical staff	1	594,000	1.90	2,741,538	3,335,538	834
	Medical staff	1	1,134,000	3.63	5,233,846	6,367,846	1,592
	Medical staff	1	528,000	1.69	2,436,923	2,964,923	741
	Medical staff	1	498,000	1.60	2,298,462	2,796,462	699
	Medical staff	1	432,000	1.38	1,993,846	2,425,846	606
	Cleaner	2	624,000	1.00	1,440,000	2,064,000	516
Ang Koul	Director	1	630,000	2.02	2,907,692	3,537,692	884
	Medical staff	1	588,000	1.88	2,713,846	3,301,846	825
	Medical staff	1	540,000	1.73	2,492,308	3,032,308	758
	Medical staff	1	486,000	1.56	2,243,077	2,729,077	682
	Medical staff	1	432,000	1.38	1,993,846	2,425,846	606

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Medical staff	1	432,000	1.38	1,993,846	2,425,846	606
Cleaner	2	624,000	1.00	1,440,000	2,064,000	516
Total	72	63,408,400	102.52	147,622,154	211,030,554	52,758

		RC	USD	
Needed from user fees:	99%	147,622,154	36,906	
Total user fees income needed:		149,113,287	37,278	
H/C user fee income:		31,931,636	7,983	See Table
RH user fee income:		46,133,000	11,533	See Table
Deficit:		71,048,651	17,762	

Annex 5 49% of user income to bonuses for the RH

Table 27: 49% of user fee income to bonuses for the RH

Indicators & info:	
Population Kep:	36,592
exchange rate Riel/Usd:	4,000
User fee income: salaries	49%
User fee income: running costs	50%
User fee income: treasurie:	1%

Position	Basic units
Director	5.51
Medical doctors	5.62
Secondary nurses	3.66
Secondary midwife	3.66
Primary nurses	2.27
Medical aids (?)	1.38
Driver	1.38
Cleaner	1.00
Total Units	65

Scenario 1: 2003	Fee	HIS data	Fee income
OPD consultation new cases	2,000	8,734	17,468,000
Paediatrics & IPD	30,000	715	21,450,000
X-ray	15,000	119	1,785,000
Echo	10,000	67	670,000
Delivery	40,000	119	4,760,000
Total			**46,133,000**

	Annual bonus
Director	1,916,758
Medical doctors	1,952,873
Secondary nurses	1,273,380
Secondary midwife	1,273,380
Primary nurses	789,175
Medical aids (?)	481,530
Driver	481,530
Cleaner	347,772

Scenario 2: OPD lower	Fee		Fee income
OPD consultation new cases	2,000	3,500	7,000,000
Paediatrics & IPD	30,000	715	21,450,000
X-ray	15,000	119	1,785,000
Echo	10,000	67	670,000
Delivery	40,000	119	4,760,000
Total			**35,665,000**

	Annual bonus
Director	1,481,828
Medical doctors	1,509,748
Secondary nurses	984,438
Secondary midwife	984,438
Primary nurses	610,104
Medical aids (?)	372,267
Driver	372,267
Cleaner	268,859

Scenario 3: OPD low + IPD up	Fee		Fee income
OPD consultation new cases	2,000	1,000	2,000,000
Paediatrics & IPD	30,000	1,200	36,000,000
X-ray	15,000	200	3,000,000
Echo	10,000	100	1,000,000
Delivery	40,000	150	6,000,000
Total			**48,000,000**

	Annual bonus
Director	1,994,329
Medical doctors	2,031,905
Secondary nurses	1,324,914
Secondary midwife	1,324,914
Primary nurses	821,112
Medical aids (?)	501,018
Driver	501,018
Cleaner	361,846

Scenario 3: OPD up + IPD up	Fee		Fee income
OPD consultation new cases	2,000	8,000	16,000,000
Paediatrics & IPD	30,000	1,200	36,000,000
X-ray	15,000	200	3,000,000
Echo	10,000	100	1,000,000
Delivery	40,000	150	6,000,000
Total			**62,000,000**

	Annual bonus
Director	2,576,008
Medical doctors	2,624,544
Secondary nurses	1,711,347
Secondary midwife	1,711,347
Primary nurses	1,060,604
Medical aids (?)	647,148
Driver	647,148
Cleaner	467,385

Annex 6 99% of user income to bonuses for the RH

Table 28: 99% of user fee income to bonuses for the RH

Indicators & info:	
Population Kep:	36,592
exchange rate Riel/Usd:	4,000
User fee income: salaries	99%
User fee income: running costs	0%
User fee income: treasurie:	1%

Position	Basic units
Director	5.51
Medical doctors	5.62
Secondary nurses	3.66
Secondary midwife	3.66
Primary nurses	2.27
Medical aids (?)	1.38
Driver	1.38
Cleaner	1.00
Total Units	65

Scenario 1: 2003	Fee	HIS data	Fee income
OPD consultation new cases	2,000	8,734	17,468,000
Pediatrics & IPD	30,000	715	21,450,000
X-ray	15,000	119	1,785,000
Echo	10,000	67	670,000
Delivery	40,000	119	4,760,000
Total			**46,133,000**

	Annual bonus
Director	3,872,633
Medical doctors	3,945,600
Secondary nurses	2,572,747
Secondary midwife	2,572,747
Primary nurses	1,594,455
Medical aids (?)	972,888
Driver	972,888
Cleaner	702,641

Scenario 2: OPD lower	Fee		Fee income
OPD consultation new cases	2,000	3,500	7,000,000
Pediatrics & IPD	30,000	715	21,450,000
X-ray	15,000	119	1,785,000
Echo	10,000	67	670,000
Delivery	40,000	119	4,760,000
Total			**35,665,000**

	Annual bonus
Director	2,993,897
Medical doctors	3,050,307
Secondary nurses	1,988,967
Secondary midwife	1,988,967
Primary nurses	1,232,658
Medical aids (?)	752,131
Driver	752,131
Cleaner	543,205

Scenario 3: OPD low + IPD up	Fee		Fee income
OPD consultation new cases	2,000	1,000	2,000,000
Pediatrics & IPD	30,000	1,200	36,000,000
X-ray	15,000	200	3,000,000
Echo	10,000	100	1,000,000
Delivery	40,000	150	6,000,000
Total			**48,000,000**

	Annual bonus
Director	4,029,359
Medical doctors	4,105,278
Secondary nurses	2,676,866
Secondary midwife	2,676,866
Primary nurses	1,658,982
Medical aids (?)	1,012,260
Driver	1,012,260
Cleaner	731,077

Scenario 3: OPD up + IPD up	Fee		Fee income
OPD consultation new cases	2,000	10,000	20,000,000
Pediatrics & IPD	30,000	1,200	36,000,000
X-ray	15,000	200	3,000,000
Echo	10,000	100	1,000,000
Delivery	40,000	150	6,000,000
Total			**66,000,000**

	Annual bonus
Director	5,540,368
Medical doctors	5,644,757
Secondary nurses	3,680,691
Secondary midwife	3,680,691
Primary nurses	2,281,101
Medical aids (?)	1,391,858
Driver	1,391,858
Cleaner	1,005,231

Annex 7 Health centre income

Table 29: Health centre income

Indicators & info:	
Population Kep:	36,592
Utilization rate:	0.55
Potential new cases:	20,126
Fertility rate:	2.80%
ANC visits:	2
TBA deliveries	50%
Health staff deliveries	30%
Health center deliveries:	20%
exchange rate Riel/Usd:	4,000
User fee income: salaries	49%
User fee income: running costs	50%
User fee income: treasurie:	1%

Activity	Fee
OPD consultation	1,000
ANC first visit	500
ANC 2nd visit	free
Home delivery	40,000
H/C delivery	30,000
Home delivery with ANC visit	35,000
H/C delivery with ANC visit	25,000

	Population	New case	Antenatel care	Staff deliveries	H/C deliveries
AngKoal	6,972	3,835	390	59	39
Ou Krasar	5,901	3,246	330	50	33
Pong Tuek	7,886	4,337	442	66	44
Prey Thom	10,794	5,937	604	91	60
Total	31,553	17,354	1,767	265	177

	NC income	ANC income	Staff dlvrs income	H/C deliveries income	Total
AngKoal	3,834,600	195,216	2,049,768	976,080	7,055,664
Ou Krasar	3,245,550	165,228	1,734,894	826,140	5,971,812
Pong Tuek	4,337,300	220,808	2,318,484	1,104,040	7,980,632
Prey Thom	5,936,700	302,232	3,173,436	1,511,160	10,923,528
Total	17,354,150	883,484	9,276,582	4,417,420	**31,931,636**

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2003	Total budget	Salaries	Running costs	User fees
AngKoal	16,188,164	3,108,000	6,024,500	7,055,664
Ou Krasar	17,065,112	3,568,800	7,524,500	5,971,812
Pong Tuek	19,249,132	5,244,000	6,024,500	7,980,632
Prey Thom	11,889,528	966,000	0	10,923,528
Total	64,391,936	12,886,800	19,573,500	31,931,636

2003	Staff	Director	Medical staff	Auxiliary staff	Staff/capita	Staff/NC
AngKoal	8	1	5	2	872	479
Ou Krasar	7	1	4	2	843	464
Pong Tuek	10	1	7	2	789	434
Prey Thom	11	1	8	2	981	540
Total	36					

Position	Present range		Average	Relative weights
Director	630,000	1,098,000	906,000	2.90
Medical staff	432,000	1,134,000	564,933	1.81
Auxiliary staff	312,000	312,000	312,000	1.00

	Basic unit	Director	Medical staff	Auxilliary staff
Units per position	lowest salary	2.90	1.81	1.00

2003	Total	Director	Medical staff	Auxilliary staff
AngKoal	14	2.90	9.05	2.00
Ou Krasar	12	2.90	7.24	2.00
Pong Tuek	18	2.90	12.67	2.00
Prey Thom	19	2.90	14.48	2.00

Annual bonus income CR	Director	Medical staff	(Per position)	Auxilliary staff	(Per position)
AngKoal	718,717	2,242,892	448,578	495,667	247,833
Ou Krasar	699,007	1,745,107	436,277	482,074	241,037
Pong Tuek	645,446	2,819,929	402,847	445,135	222,567
Prey Thom	800,946	3,999,206	499,901	552,377	276,188
Total					

Annual bonus income USD	Director	Medical staff	(Per position)	Auxilliary staff	(Per position)
AngKoal	180	561	112	124	62
Ou Krasar	175	436	109	121	60
Pong Tuek	161	705	101	111	56
Prey Thom	200	1,000	125	138	69
Total					

Annex 8 Administrative transfer of Kep from District to City level

Royal Government of Cambodia
No. 59/ANK/BK
October 7, 1995

ANUKRET
on the Administrative Transfer of Kep from District to City Level

Royal Government of Cambodia

- Seen the Constitution of the Kingdom of Cambodia;
- Seen the Royal Decree of His Majesty the Kingdom of Cambodia, Samdech Preach NORODOM SIHANOUK VARMAN, dated November1, 1993 on the Formation of the Royal Government;
- Seen the Law on the Organization and Functioning of the Council of Ministers and its promulgation by Royal Decree (Kram), dated July 20, 1994;
- Seen the Act dated August 11, 1992 and the Sub-decree dated December 9, 1992 of the Former State of Cambodia, on the Organization and Functioning of Kep City;
- Seen the Sub-decree, dated December 5, 1994, on the Transfer of the Administrative Structure of Kep City;
- Seen the Sub-decree No 16, dated December 20, 1993, on the Organization and Functioning of the Ministry of Interior; and
- Pursuant to the proposals of Co- ministers of Interior

IT IS HEREBY DECIDED

ARTICLE 1:

To change the administrative structure of Kep from a District level under the jurisdiction of Kampot province to a Municipality level under the jurisdiction of the Ministry of Interior. The name of "*Krong Kep*" shall remain unchanged. The administrative office of Krong Kep shall be located in Sankat Kep.

ARTICLE 2:

Krong Kep shall have two *khanns* divided into *Sangkats*:

- *Khann* Kep has two sangkat : Kep and Prey Thom.
- *Khann* Damnak Chang - O has three *Sangkats*: O - krasa , Pong Tek and Angkol

ARTICLE 3:

Krong Kep shall have 13,217 Km^2 in land area and has its borderlines as follows:

- On the East, crossing *Khum* Phnom Leav I and Phnom Leav II from *Srok* Kampong Trach.
- On the West, crossing *Khum* O- Krasa from *Srok* Kampot.
- On the North, adjacent to *Khum* Kon Sat, *Srok* Kampot and K*hum* Kampong Trach, *Srok* Kampong Trach, *Khet* Kampot.
- On the South, against the coastlines of the international sea of Cambodia-Vietnam.

ARTICLE 4:

The Sub-decree No 05 dated February 14, 1994, and No 31 dated December 9, 1992, shall be annulled.

ARTICLE 5:

The Co-ministers in charge of the Cabinet of the Council of Ministers, the Co-ministers of Interior, Ministers or Secretaries of State of institutions concerned and the Delegation of Royal Government to the Municipality of Krong Kep shall be responsible for the implementation of this Sub-decree within their respective capacity's.

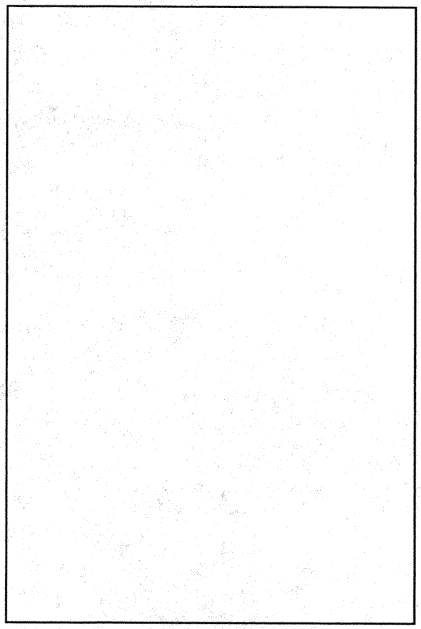
ARTICLE 6:

This Sub-decree shall be implemented from the date of its signature.

The First Prime Minister	The Second Prime Minister
Signature and Seal NORODOM RANARIDDH	Signature and Seal HUN SEN

Annex 9 General information on Krong Kep

Source: http://www.moc.gov.kh/National%20Data%20Resources/context.html



ADMINISTRATION

SIM SUN
Kep Governor
FUN

AN HE
Kep First Deputy Governor
CPP

CHAN SAM AN
Kep Second Deputy Governor
FUN

SAM SARIN
Kep Third Deputy Governor
CPP

1. Population

(i) Size and Distribution

Krong Kep is a coastal municipality with a population of 28,660, comprising 14,014 males and 14,646 females. The percentage of female population is 51.1.

The municipality is entirely urban. It consists of 2 districts, 5 communes and 16 villages. The population of Krong Keb constitutes 0.3 percent of Cambodia's population.

Density of population in the municipality is 85 per km^2 which is higher than the national density of 64.

2. Households

(i) Total Number of Households and Average Household Size

The total number of normal or regular households (i.e. excluding institutional, homeless, boat and transient population) in the municipality is 5,282 comprising a population of 28,028 which gives an average household size of 5.3.

(ii) Male and Female headed Households

The percentages of female-headed and male-headed households are 26.8 and 73.2 respectively. About 66.2 percent of the female-headed households are aged 40 and above. In the case of male-headed households the corresponding percentage is only 45.6.

3. Age, Sex And Marital Status Distribution

(i) Age

The age-sex distribution of the population may be seen in the age pyramid. Children (age 0-14) form 46.1 percent of the total population in the municipality. The proportion of female children (43.5 percent) is less than that of male children (48.9 percent).
The economically productive age group (15-64) forms 50.3 percent and the elderly (aged 65 and over) form 3.6 percent. People aged 18 years and above (voting age group) constitute 46.9 percent.

(ii) Sex ratio

The sex ratio of Krong Kaeb is 95.7. It is the same as the urban sex ratio at the national level.

(iii) Dependency ratio

The Age dependency ratio which works out to 99.1 percent reflects the high dependency that the productive population bears.

(ii) Marital Status of population aged 15+

Table 30:Marital Status~by Sex

Sex	Marital Status (in percentage)				
	Never Married	Married	Widowed	Divorced	Separated
Both sexes	26.7	63.5	7.2	2.4	0.2
Males	30.8	67.0	1.4	0.7	0.1
Females	23.1	60.6	12.1	3.8	0.4

The proportions of single (never married) and married categories among males are higher than the corresponding proportions among females. Proportion of women in each of the categories widowed, divorced and separated is higher than that of men.

4. Literacy And Education

The male literacy rate is considerably higher than that of females.

Table 31: Literate population and Literacy Rates

Sex	Population aged 7 +	Literate population	Percentage Literate
Both Sexes	22,606	12,232	54.1
Males	10,873	6,884	63.3
Females	11,733	5,348	45.6

The educational level of literate population as a whole has revealed that about 68.0 percent of them had not completed the primary level. Those who have achieved the primary and lower secondary levels constitute 22.5 percent and 6.7 percent respectively. A small percentage (1.4) of literate population have acquired literacy without passing any grade/class. Those with secondary level qualification form 1.3 percent. Only 0.1 percent had completed beyond secondary level of education. Among females 74.5 percent have not completed primary level whereas among males the corresponding percentage is 62.8.

5. Economically Active Population

The number of economically active persons in Krong Kaeb is 12,385 of which 6,342 or 51.2 percent are females. Crude activity rate is slightly higher for males. Unemployment rate is nearly the same for both sexes.

Table 32: Crude Activity Rates and Unemployment Rates

Sex	Crude Activity Rate	Unemployment Rate
Both Sexes	54.7	2.0
Males	55.5	2.2
Females	53.9	1.9

Distribution of employed persons by sector shows that 82.2 percent of them are in the primary sector. The secondary and tertiary sectors account for 2.2 percent and 15.6 percent respectively. In the primary sector women (55.0 percent) outnumber men.

6. Migration

The number of migrants i.e. those who had their previous residence outside the place of enumeration, is 7,887 which is 27.5 percent of the total population. Among these migrants, males constitute 50.9 percent. Most of the migrants have moved from other provinces.

Table 33: Distribution of Migrants by Previous Residence

Previous Residence	Percentage of migrants		
	Both Sexes	Males	Females
Within Krong Kep	9.6	9.3	10.0
From another province	89.1	89.3	88.7
From outside Cambodia	1.3	1.4	1.3

A sizeable proportion of migrants had changed their residence because of the reason "family moved". The proportion of female migrants is higher under this reason. Under each of the reasons, "transfer of work place" and "in search of employment", the percentage of males is higher.

Table 34:Reason for Migration

Reason for migration	Both Sexes	Males	Females
Transfer of work place	14.7	24.9	4.2
In search of employment	12.6	17.2	7.6

Reason for migration	Both Sexes	Males	Females
Education	2.7	3.4	2.0
Marriage	12.2	13.6	10.8
Family moved	43.7	28.6	59.4
Natural Calamities/insecurity	2.7	2.1	3.3
Repatriation/Return after displacement	6.3	6.3	6.2
Other Reasons	5.1	3.9	6.5

7. Household Amenities

Main Source of Drinking Water

Piped water, water from tube/pipe well and water bought may be considered comparatively safer. Viewed from this angle only 12.4 percent of the households in the province have access to safe drinking water.

Table 35:Distribution of Households by Main Source of Drinking Water

Main Source of Drinking Water	Households
Piped water	2.5
Tube/pipe well	9.7
Dug well	52.5
Spring, river stream, lake/pond, rain.	34.6
Bought	0.2
Other	0.5

Main Source of Light

Most of households in the province use kerosene lamps for lighting. The percentage of households using electricity from general electric power and/or generator is 9.2.

Table 36:Distribution of Households by Main Source of Light

Total	City Power	Generator	Both City Power And Generator	Kerosene	Battery	Other Sources
100	4.9	1.9	2.4	89.7	1.1	N

Toilet Facility

Toilet facility within premises is available only to 3.3 percent of households in the province.

Fuel for Cooking

Most of the households use firewood as main fuel for cooking while a small percentage use kerosene or charcoal.

Table 37:Distribution of Households by Main Type of Fuel for Cooking

Total	Firewood	Charcoal	Kerosene	Liquefied Petroleum Gas (LPG)	Others
100	96.3	1.4	2.0	0.3	N

Table 38:Population Totals, Krong Kaeb Province, 1998

Code	Province	Total Number of Households	Population			Sex Ratio	Average Household Size (*)
			Both Sexes	Males	Females		
23	Krong Kep						
	- Total	5,369	28,660	14,014	14,646	95.7	5.3
	- Urban	5,369	28,660	14,014	14,646	95.7	5.3
	- Rural	-	-	-	-	-	-
01	Damnak Chang'aeur (U)	3,369	18,341	8,863	9,478	93.5	5.4
01	Angkaol	1,127	6,303	3,059	3,244	94.3	5.6
02	Ou Krasar	1,041	5,741	2,758	2,983	92.5	5.5
03	Pong Tuek	1,201	6,297	3,046	3,251	93.7	5.2
02	**Kep (U)**	**2,000**	**10,319**	**5,151**	**5,168**	**99.7**	**5.1**
01	Kep	786	4,017	2,047	1,970	103.9	5.0
02	Prey Thum	1,214	6,302	3,104	3,198	97.1	5.1

(*) Based on Normal or Regular Households

Annex 10 NGO support

Table 39: Summary of NGO disbursements by province, 1996-1998 (in '000 US$)

Source: Development Cooperation Report for Cambodia, Council for Development of Cambodia, Jan. 1999

	1996		1997		1998	
Nationwide Programs	5,904	16.46%	4,840	9.62%	6,282	11.20%
Banteay Meanchey	2,145	5.98%	3,500	6.96%	3,434	6.12%
Battambang	4,387	12.23%	4,804	9.55%	4,568	8.14%
Kampot	1,062	2.96%	854	1.70%	1,364	2.43%
Kandal	2,651	7.39%	3,738	7.43%	3,265	5.82%
Koh Kong	11	0.03%	69	0.14%	535	0.95%
Kompong Cham	796	2.22%	1,370	2.72%	1,473	2.63%
Kompong Chhnang	1,313	3.66%	1,065	2.12%	1,151	2.05%
Kompong Speu	1,729	4.82%	2,007	3.99%	3,595	6.41%
Kompong Thom	1,073	2.99%	2,318	4.61%	2,083	3.71%
Kratie	499	1.39%	961	1.91%	1,068	1.90%
Krong Kep	0	0.00%	36	0.07%	32	0.06%
Krong Pailin	0	0.00%	33	0.07%	54	0.10%
Krong Sihanouk	0	0.00%	1,039	2.06%	968	1.73%
Mondulkiri	86	0.24%	0	0.00%	0	0.00%
Phnom Penh	7,196	20.06%	13,407	26.64%	14,616	26.05%
Preah Vihear	276	0.77%	163	0.32%	409	0.73%
Prey Veng	1,112	3.10%	1,076	2.14%	1,155	2.06%
Pursat	1,948	5.43%	2,560	5.09%	2,825	5.04%
Ratanakiri	552	1.54%	643	1.28%	766	1.37%
Siem Reap	653	1.82%	2,384	4.74%	2,750	4.90%
Sihanoukville	420	1.17%	0	0.00%	0	0.00%
Stung Treng	233	0.65%	797	1.58%	972	1.73%
Svay Rieng	897	2.50%	815	1.62%	1,114	1.99%
Takeo	925	2.58%	1,841	3.66%	1,619	2.89%
TOTAL	**35,868**		**50,320**		**56,098**	

Source: Development Cooperation Report for Cambodia, Council for Development of Cambodia, Jan. 1999

Annex 11 Terms of Reference

Overall Objective of ToR

To establish a Plan of Action for a CIH contribution to Health Financing Schemes, with particular attention to Cambodia in general and Kep in particular, with a view to installing a HFS scheme in Kep and a methodology for "going to scale".

Main Components of the Action Plan - Tasks and Responsibilities

1. A review of the literature on health financing schemes. This could be an already published annotated bibliography or systematic review.
2. A review of existing literature on HFS in Cambodia, both published and unpublished (sourced in the MEDICAM library Phnom Penh).
3. Review MoH budget for Kep
4. Prepare a budget in line with New Deal structure
5. Make contact with the MSF-B program, both in Phnom Penh and Sotnikum, in order to gain a better insight into their experiences and lessons learned.
6. Make contact with the two known NGOs that have been engaged as the third party managers of the Equity Fund component of the New Deal. Discuss the potential of submitting a proposal to the Canada Fund which would see the establishment of a branch of their NGO in Kep.
7. Conducting a workshop with CIH PHC counterparts on HFS to introduce the concept and various examples of HSF. This would be a follow-up from the "Study Tour" on the same issue conducted by Ian Small and counterparts to the MSF New Deal and Swiss Red Cross project site. In attendance should be Kep level counterparts and at least one counterpart from the National Centre for Health Promotion.
8. Coordinate subsequent work on the HFS (which could) including:
    I. A workshop with stakeholder involvement (Health Care Workers) in HFS
    II. Survey all stakeholders (HCW and health administrators) re their interest and willingness to develop a HFS
    III. Determine a poverty profile/assessment of Kep
    IV. Determine patient fee scale
    V. Community consultation regarding Equity Fund
    VI. Develop criteria for admission to the fund
    VII. Determine the Funds structure

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